

WAFER, INTERMEDIATE WAFER ASSEMBLY AND ASSOCIATED METHOD  
FOR FABRICATING A SILICON ON INSULATOR WAFER HAVING AN  
IMPROVED EDGE PROFILE

ABSTRACT OF THE DISCLOSURE

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A wafer, an intermediate wafer assembly and an improved method of fabricating a wafer having an improved edge profile are provided. The wafer may have various edge profiles that eliminate, or at least reduce, the chamfered portion proximate one of the major surfaces. For example, the wafer may have an edge with curved surface extending continuously from one major surface to another, an angled edge segment adjacent one major surface and a curved surface extending from the angled edge segment to the other major surface, or first and second angled edge segments adjacent the opposed major surfaces and a curved surface extending therebetween with the second angled edge segment being at least 50% smaller in a radial direction than the first angled edge segment. The wafer may serve as the bonded wafer, the handle wafer, or both the bonded and handle wafers of an SOI wafer.

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